

DETAILS OF AMENDMENTS

Please preliminarily amend the subject PCT national stage application as follows and before calculating the filing fee therefor:

IN THE CLAIMS

Cancel claims 2-72 without prejudice.

Add new claims 73-120 as follows:

73. (ADDED) A method for securing an intravertebral prosthetic device, comprising implanting an arcuate fixation member between the vertebrae and passing a portion of the arcuate fixation member through the intravertebral prosthetic device, wherein a portion of the fixation member is made from a flexible material.

74. (ADDED) The method of claim 73 wherein the fixation member is implanted through a pre-formed aperture in each of the adjacent vertebrae.

75. (ADDED) The method of claim 73 wherein the fixation member is implanted through a pre-formed aperture in one of the adjacent vertebrae and in a partially pre-formed aperture in the other of the adjacent vertebrae.

76. (ADDED) The method of claim 73 wherein the preformed aperture has been drilled in each of the adjacent vertebrae.

77. (ADDED) The method of claim 73 wherein the fixation member is the sole apparatus employed to maintain the location and orientation of the intravertebral prosthetic device.

78. (ADDED) The method of claim 73 wherein the flexible material is one of silicon, elastomeric polymers, polyurethanes and copolymers thereof, hydrogels, collagen, bioabsorbables, compositions, a metallic spring or coil, or a material that allow continual mobility between the vertebral bodies.

79. (ADDED) The method of claim 73, wherein the fixation member includes a non-flexible portion made of a material conducive to attachment to the vertebrae.

80. (ADDED) The method of claim 79, wherein the non-flexible portion of the fixation member is made from one or more of a metal, bone, morphogenic protein, carbon fiber composite, nitinol, a biodegradable material, collagen or collagen coated metal or bone.

81. (ADDED) The method of claim 73, wherein the flexible portion of the fixation member is disposed between end sections, each end section being made of non-flexible material conducive to attachment to the vertebrae.

82. (ADDED) The method of claim 81, wherein the non-flexible material is made one or more of a metal, bone, morphogenic protein, carbon fiber composite, nitinol, a biodegradable material, collagen or collagen coated metal or bone.

83. (ADDED) The method of claim 73 wherein the fixation member is one of solid, hollow or with ingrowth fenestrations and screw holes or expansion bolts or staples.

84. (ADDED) A method for securing an intravertebral prosthetic device of a spine, comprising:

providing a positioning apparatus including two guide sleeves, each guide sleeve having a long axis;

locating the two guide sleeves with respect to the adjacent vertebrae such that a vertex formed by the long axis of each guide sleeve is located in the intervertebral space for the adjacent vertebrae;

forming an aperture in each of the adjacent vertebrae using at least one of the guide sleeves;

inserting an implant into the apertures formed in each of the adjacent vertebrae so that the implant extends between the adjacent vertebrae and

through the intervertebral space and so a portion of the implant passes fixation member through the intravertebral prosthetic device, wherein the portion of the implant is made from a flexible material.

85. (ADDED) The method of claim 84 wherein said step of forming includes forming an arcuate aperture in each of the adjacent vertebrae such that the arcuate apertures in the adjacent vertebrae have a common axis of rotation.

86. (ADDED) The method of claim 84 wherein the implant is inserted through a through aperture in one of the adjacent vertebrae and in a partially formed aperture in the other of the adjacent vertebrae.

87. (ADDED) The method of claim 84 wherein the implant is the sole apparatus employed to maintain the location and orientation of the intravertebral prosthetic device.

88. (ADDED) The method of claim 84 wherein the flexible material is one of silicon, elastomeric polymers, polyurethanes and copolymers thereof, hydrogels, collagen, bioabsorbables, compositions, a metallic spring or coil, or a material that allow continual mobility between the vertebral bodies.

89. (ADDED) The method of claim 84, wherein the implant includes a non-flexible portion made of a material conducive to attachment to the vertebrae.

90. (ADDED) The method of claim 89, wherein the non-flexible portion of the implant is made from one or more of a metal, bone, morphogenic protein, carbon fiber composite, nitinol, a biodegradable material, collagen or collagen coated metal or bone.

91. (ADDED) The method of claim 84, wherein the flexible portion of the implant is disposed between end sections, each end section be made of non-flexible material conducive to attachment to the vertebrae.

92. (ADDED) The method of claim 91, wherein the non-flexible material is made one or more of a metal, bone, morphogenic protein, carbon fiber composite, nitinol, a biodegradable material, collagen or collagen coated metal or bone.

93. (ADDED) The method of claim 84 wherein the step of implanting includes:

inserting a beginning end of the implant into an entrance opening of one of the adjacent vertebrae; applying a force to the portion of the implant extending from the entrance opening so as to drive the implant beginning end though the aperture in the aperture of said one of the adjacent vertebrae, through the intervertebral space and into the aperture in the other of the adjacent vertebrae.

94. (ADDED) A spinal intravertebral prosthetic system, comprising:
an intravertebral prosthetic device;
an arcuate implant member of a size sufficient to extend between two adjacent vertebrae; and

wherein a portion of the implant, the portion passing through the intravertebral prosthetic device, is made from a flexible material.

95. (ADDED) The spinal intravertebral prosthetic system of claim 94 wherein the flexible material is one of silicon, elastomeric polymers, polyurethanes and copolymers thereof, hydrogels, collagen, bioabsorbables, compositions, a metallic spring or coil, or a material that allow continual mobility between the vertebral bodies.

96. (ADDED) The spinal intravertebral prosthetic system of claim 94, wherein the implant includes a non-flexible portion made of a material conducive to attachment to the vertebrae.

97. (ADDED) The spinal intravertebral prosthetic system of claim 96, wherein the non-flexible portion of the implant is made from one or more of a metal, bone, morphogenic protein, carbon fiber composite, nitinol, a biodegradable material, collagen or collagen coated metal or bone...

98. (ADDED) The spinal intravertebral prosthetic system of claim 94, wherein the flexible portion of the implant is disposed between end sections, each end section being made of non-flexible material conducive to attachment to the vertebrae.

99. (ADDED) The spinal intravertebral prosthetic system of claim 98, wherein the non-flexible material is made one or more of a metal, bone, morphogenic protein, carbon fiber composite, nitinol, a biodegradable material, collagen or collagen coated metal or bone.

100. (ADDED) A spinal intravertebral prosthetic device kit comprising:

an intravertebral prosthetic device;
an arcuate fixation member; and
wherein a portion of the fixation member, the portion passing through the intravertebral prosthetic device, is made from a flexible material.
an arcuate fixation member.

101. (ADDED) A spinal intravertebral prosthetic device kit comprising:
a positioning apparatus including:
two guide sleeves, each guide sleeve having a long axis,
a cross member,
an intravertebral spacer,

wherein the guide sleeves are pivotably mounted to the cross member, and

wherein the intravertebral spacer is spaced from the cross member and interconnected thereto so as to be between the pivot points for the guide sleeves;

an intravertebral prosthetic device;

a fixation member; and

wherein a portion of the fixation member, the portion passing through the intravertebral prosthetic device, is made from a flexible material.

an arcuate fixation member.

102. (ADDED) The spinal intravertebral prosthetic device kit of claim 101 wherein the flexible material is one of silicon, elastomeric polymers, polyurethanes and copolymers thereof, hydrogels, collagen, bioabsorbables, compositions, a metallic spring or coil, or a material that allow continual mobility between the vertebral bodies.

103. (ADDED) The spinal intravertebral prosthetic device kit of claim 101, wherein the fixation member includes a non-flexible portion made of a material conducive to attachment to the vertebrae.

104. (ADDED) The spinal intravertebral prosthetic device kit of claim 103, wherein the non-flexible portion is made from one or more of a metal, bone, morphogenic protein, carbon fiber composite, nitinol, a biodegradable material, collagen or collagen coated metal or bone.

105. (ADDED) The spinal intravertebral prosthetic device kit of claim 101, wherein the flexible portion of the fixation member is disposed between end sections, each end section be made of non-flexible material conducive to attachment to the vertebrae.

106. (ADDED) The spinal intravertebral prosthetic device kit of claim 105, wherein the non-flexible material is made one or more of a metal, bone,

morphogenic protein, carbon fiber composite, nitinol, a biodegradable material, collagen or collagen coated metal or bone.

107. The spinal intravertebral prosthetic device kit of claim 101, wherein the fixation member is arcuate.

108. (ADDED) A method for securing an intravertebral prosthetic device, comprising:

providing a positioning apparatus including a pivot arm that is rotatable about a pivot point;

locating the positioning apparatus with respect to the adjacent vertebrae such that the pivot point is disposed between the adjacent vertebrae;

forming an aperture in each of the adjacent vertebrae responsive to rotation of the pivot arm about the pivot point, one of the apertures being formed is a through aperture; and

inserting an implant into the apertures formed in each of the adjacent vertebrae so that the implant extends between the adjacent vertebrae and through the intervertebral space and passes through a portion of the intravertebral prosthetic device, wherein a portion of the fixation member is made from a flexible material.

109. The method of claim 108 wherein said step of forming includes forming an arcuate aperture in each of the adjacent vertebrae.

110. (ADDED) The method of claim 108 wherein the flexible material is one of silicon, elastomeric polymers, polyurethanes and copolymers thereof, hydrogels, collagen, bioabsorbables, compositions, a metallic spring or coil, or a material that allow continual mobility between the vertebral bodies.

111. (ADDED) The method of claim 108, wherein the implant includes a non-flexible portion made of a material conducive to attachment to the vertebrae.

112. (ADDED) The method of claim 111, wherein the non-flexible portion of the implant is made from one or more of a metal, bone, morphogenic protein, carbon fiber composite, nitinol, a biodegradable material, collagen or collagen coated metal or bone.

113. (ADDED) The method of claim 108, wherein the flexible portion of the implant is disposed between end sections, each end section be made of non-flexible material conducive to attachment to the vertebrae.

114. (ADDED) The method of claim 113, wherein the non-flexible material is made one or more of a metal, bone, morphogenic protein, carbon fiber composite, nitinol, a biodegradable material, collagen or collagen coated metal or bone.

115. (ADDED) The method of claim 108, wherein the step of forming includes forming an aperture in each of the adjacent vertebrae by one of drilling or ablation of the bone by an energy source.

116. (ADDED) The stabilizing method of claim 108 wherein the apparatus being provided further includes a drill that is affixed to the pivot arm such that when the pivot arm rotates about the pivot point the drill follows a defined arcuate cutting path.

117. (ADDED) The method of claim 116 wherein the drill includes a curved drilling element.

118. (ADDED) The method of claim 117 wherein the curved drilling element comprises a curved cannula, a flexible member disposed within the curved cannula, and a cutting burr affixed to an end of the flexible member, the flexible burr for cutting an arcuate aperture in each of the adjacent vertebrae.

119. (ADDED) The method of claim 116 wherein the step of forming includes rotating the pivot arm so that a through aperture is formed in one of the adjacent vertebrae and so a partially formed (i.e., non-through aperture) is formed in the other of the adjacent vertebrae.

120. (ADDED) The method of claim 116 wherein the step of forming includes rotating the pivot arm so that a through aperture is formed in each of the adjacent vertebrae.